WHAT IS CLAIMED IS:

1. A layered catalyst composite comprising:

(a) a carrier;

(b) a first layer deposited on the carrier, said first layer comprising a high surface area refractory metal oxide;

(c) a second layer deposited on the first layer, said second layer comprising palladium and/or platinum deposited on a high surface area refractory metal oxide, and having substantially no oxygen storage components; and

(d) a third layer deposited on the second layer, said third layer comprising: (i) platinum and/or rhodium and (ii) an oxygen storage component, deposited on a high surface area refractory metal oxide.

2. The composite of claim 1 wherein the first layer is deposited on the carrier in a loading of about 0.5 to about 1.5 g/in^3.

3. The composite of claim 1 wherein the second layer is deposited on the first layer in a loading of about 1.5 to about 2.5 g/in^3.

4. The composite of claim 1 wherein the third layer is deposited on the second layer in a loading of about 0.5 to about 1.5 g/in^3.

5. The composite of claim 1 wherein the metal oxide comprises gamma alumina having a specific surface area of about 60 to about 300 m^2/g.

6. The composite of claim 5 wherein the gamma alumina is present in the first layer in a loading of about 0.5 to about 1.5 g/in^3.

7. The composite of claim 5 wherein the gamma alumina is present in the second layer in a loading of about 0.7 to about 2.2 g/in^3.

8. The composite of claim 5 wherein the gamma alumina is present in the third layer in a loading of about 0.25 to about 0.75 g/in^3.

9. The composite of claim 1 wherein the first layer further comprises 0 to about 30 g/ft^3 of platinum.

10. The composite of claim 1 wherein the first layer further comprises 0 to about 0.75 g/in^3 of an oxygen storage component.

11. The composite of claim 10 wherein the oxygen storage component comprises one or more reducible oxides of one or more rare earth metals.

12. The composite of claim 11 wherein the oxygen storage component is selected from the group consisting of ceria, a mixed oxide of cerium and zirconium and a mixed oxide of cerium, zirconium and neodymium.

13. The composite of claim 1 wherein the first layer further comprises 0 to about 0.3 g/in^3 of a stabilizer comprising one or more non-reducible metal oxides wherein the metal is selected from the group consisting of barium, calcium, magnesium, strontium, and mixtures thereof.

14. The composite of claim 13 wherein the stabilizer comprises one or more oxides of barium and/or strontium.

15. The composite of claim 1 wherein the first layer further comprises 0 to about 0.3 g/in^3 of one or more promoters comprising one or more non-reducible oxides of one or more rare earth metals.

16. The composite of claim15 wherein the rare earth metal is selected from the group consisting of lanthanum, praseodymium, yttrium, zirconium and mixtures thereof.

17. The composite of claim 1 wherein the palladium and platinum are present in the second layer in a loading of about 20 to about 200 g/ft^3 of palladium and 0 to about 10 g/ft^3 of platinum.

18. The composite of claim 17 wherein the palladium and platinum are present in the second layer in a loading of 50 to 150 g/ft^3 of palladium and 2 to 8 g/ft^3 of platinum.

19. The composite of claim 1 wherein the second layer further comprises 0 to about 0.3 g/in^3 of a stabilizer comprising one or more non-reducible metal oxides wherein the metal is selected from the group consisting of barium, calcium, magnesium, strontium and mixtures thereof.

20. The composite of claim 19 wherein the stabilizer comprises one or more oxides of barium and/or strontium.

21. The composite of claim 1 wherein the second layer further comprises 0 to about 0.3 g/in^3 of one or more promoters comprising one or more non-reducible oxides of one or more rare earth metals.

22. The composite of claim 21 wherein the rare earth metal is selected from the group consisting of lanthanum, praseodymium, yttrium, zirconium and mixtures thereof.

23. The composite of claim 1 wherein the platinum and rhodium are present in the third layer in a loading of about 2 to about 20 g/ft^3 of platinum and about 3 to about 15 g/ft^3 of rhodium.

24. The composite of claim 23 wherein the platinum and rhodium are present in the third layer in a loading of 5 to 15 g/ft^3 of platinum and 6 to 12 g/ft^3 of rhodium.

25. The composite of claim 1 wherein the oxygen storage component is present in the third layer in an amount of about 0.5 to about 1.25 g/in^3.

26. The composite of claim 25 wherein the oxygen storage component comprises one or more reducible oxides of one or more rare earth metals.

27. The composite of claim 26 wherein the oxygen storage component is selected from the group consisting of ceria, a mixed oxide of cerium and zirconium and a mixed oxide of cerium, zirconium and neodymium.

28. The composite of claim 1 wherein the third layer further comprises 0 to about 0.3 g/in^3 of a stabilizer comprising one or more non-reducible metal oxides wherein the metal is selected from the group consisting of barium, calcium, magnesium, strontium and mixtures thereof.

29. The composite of claim 28 wherein the stabilizer comprises one or more oxides of barium and/or strontium.

30. The composite of claim 1 wherein the third layer comprises 0 to about 0.3 g/in^3 of one or more promoters comprising one or more non-reducible oxides of one or more rare earth metals.

31. The composite of claim 30 wherein the rare earth metal is selected from the group consisting of lanthanum, praseodymium, yttrium, zirconium and mixtures thereof.

32. A method for treating a gas comprising hydrocarbons, carbon monoxide and nitrogen oxides which comprises flowing the gas to a catalyst member, and catalytically oxidizing the hydrocarbons and carbon monoxide and catalytically reducing the nitrogen oxides in the gas in the presence of the catalyst member, said catalyst member comprising a layered catalyst composite comprising:

(a) a carrier;

(b) a first layer deposited on the carrier, said first layer comprising a high surface area refractory metal oxide;

(c) a second layer deposited on the first layer, said second layer comprising palladium and/or platinum deposited on a high surface area refractory metal oxide, and having substantially no oxygen storage components; and

(d) a third layer deposited on the second layer, said third layer comprising: (i) platinum and/or rhodium and (ii) an oxygen storage component, deposited on a high surface area refractory metal oxide.

33. The method of claim 32 wherein the first layer is deposited on the carrier in a loading of about 0.5 to about 1.5 g/in^3.

34. The method of claim 32 wherein the second layer is deposited on the first layer in a loading of about 1.5 to about 2.5 g/in^3.

35. The method of claim 32 wherein the third layer is deposited on the second layer in a loading of about 0.5 to about 1.5 g/in^3.

36. The method of claim 32 wherein the metal oxide comprises gamma alumina having a specific surface area of about 60 to about 300 m^2/g.

37. The method of claim 36 wherein the gamma alumina is present in the first layer in a loading of about 0.5 to about 1.5 g/in^3.

38. The method of claim 36 wherein the gamma alumina is present in the second layer in a loading of about 0.7 to about 2.2 g/in^3.

39. The method of claim 36 wherein the gamma alumina is present in the third layer in a loading of about 0.25 to about 0.75 g/in^3.

40. The method of claim 32 wherein the first layer further comprises 0 to about 30 g/ft^3 of platinum.

41. The method of claim 32 wherein the first layer further comprises 0 to about 0.75 g/in^3 of an oxygen storage component.

42. The method of claim 41 wherein the oxygen storage component comprises one or more reducible oxides of one or more rare earth metals.

43. The method of claim 42 wherein the oxygen storage component is selected from the group consisting of ceria, a mixed oxide of cerium and zirconium and a mixed oxide of cerium, zirconium and neodymium.

44. The method of claim 32 wherein the palladium and platinum are present in the second layer in a loading of about 20 to about 200 g/ft^3 of palladium and 0 to about 10 g/ft^3 of platinum.

45. The method of claim 44 wherein the palladium and platinum are present in the second layer in a loading of 50 to 150 g/ft^3 of palladium and 2 to 8 g/ft^3 of platinum.

46. The method of claim 32 wherein the first layer further comprises 0 to about 0.3 g/in^3 of a stabilizer comprising one or more non-reducible metal oxides wherein the metal is selected from the group consisting of barium, calcium, magnesium, strontium and mixtures thereof.

47. The method of claim 46 wherein the stabilizer comprises one or more oxides of barium and/or strontium.

48. The method of claim 32 wherein the first layer further comprises 0 to about 0.3 g/in^3 of one or more promoters comprising one or more non-reducible oxides of one or more rare earth metals.

49. The method of claim 48 wherein the rare earth metal is selected from the group consisting of lanthanum, praseodymium, yttrium, zirconium and mixtures thereof.

50. The method of claim 30 wherein the second layer further comprises 0 to about 0.3 g/in^3 of a stabilizer comprising one or more non-reducible metal oxides wherein the metal is selected from the group consisting of barium, calcium, magnesium, strontium and mixtures thereof.

51. The method of claim 50 wherein the stabilizer comprises one or more oxides of barium and/or strontium.

52. The method of claim 32 wherein the second layer further comprises 0 to about 0.3 g/in^3 of one or more promoters comprising one or more non-reducible oxides of one or more rare earth metals.

53. The composite of claim 52 wherein the rare earth metal is selected from the group consisting of lanthanum, praseodymium, yttrium, zirconium and mixtures thereof.

54. The method of claim 32 wherein the platinum and rhodium are present in the third layer in a loading of about 2 to about 20 g/ft^3 of platinum and about 3 to about 15 g/ft^3 of rhodium.

55. The method of claim 54 wherein the platinum and rhodium are present in the third layer in a loading of 5 to 15 g/ft^3 of platinum and 6 to 12 g/ft^3 of rhodium.

56. The method of claim 32 wherein the oxygen storage component is present in the third layer in an amount of about 0.5 to about 1.25 g/in^3.

57. The method of claim 56 wherein the oxygen storage component comprises one or more reducible oxides of one or more rare earth metals.

58. The method of claim 57 wherein the oxygen storage component is selected from the group consisting of ceria, a mixed oxide of cerium and zirconium and a mixed oxide of cerium, zirconium and neodymium.

59. The method of claim 32 wherein the third layer further comprises 0 to about 0.3 g/in^3 of a stabilizer comprising one or more non-reducible metal oxides wherein the metal is selected from the group consisting of barium, calcium, magnesium, strontium and mixtures thereof.

60. The method of claim 59 wherein the stabilizer comprises one or more oxides of barium and/or strontium.

61. The method of claim 32 wherein the third layer comprises 0 to about 0.3 g/in^3 of one or more promoters comprising one or more non-reducible oxides of one or more rare earth metals.

62. The method of claim 61 wherein the rare earth metal is selected from the group consisting of lanthanum, praseodymium, yttrium, zirconium and mixtures thereof..